

## Project Update: July 2018

The Project Team (Biraj Shrestha, Binita Pandey and Bivek Gautam) comprised of professionals with backgrounds of environmental science and zoology who previously had worked with amphibians (Figure 1). The Team accomplished several tasks prior to the field visit such as preparation of amphibian survey sheet, morphometric form, threat assessment questionnaire form, acquisition of research permit from Department of Forest, procurement of field equipment, amphibian fact sheet preparation, educational flex and banner designs.



Figure 1: Project Team (left to right); Biraj Shrestha (Principal Investigator), Binita Pandey (Research Assistant) and Bivek Gautam (Research Assistant).

Our first fieldwork began from the middle of June 2018 and continued until the first week of July 2018. During this period, we conducted amphibian surveys (diurnal and nocturnal), collected information on threats, and held awareness programmes. The amphibian survey was performed in Mulpani, Keurepani, Tungechha, Nepaledada, Kulunga, Chaukidada, Khatamma and Dobhane villages of Bhojpur district. The study extended between the altitudinal ranges of 800 m asl (Mulpani) to 2300 m asl (Dobhane). We interviewed people and filled up altogether 300 questionnaire survey forms with local community in eight villages of Sadananda Municipality and Salpasilicho Rural Municipality.

After surveying amphibians, we observed a total of seven species, namely *Duttaphrynus melanostictus*, *Duttaphrynus stomaticus*, *Microhyla ornata*, *Xenophrys parva*, *Amolops marmoratus*, *Euphlyctis cyanophlyctis* and *Fejervarya* species (Figure 2).





Figure 2: Amphibians recorded during the field survey (clockwise from bottom down left);

*Xenophrys parva*, *Euphlyctis cyanophlyctis*, *Fejervarya* species and *Amolops marmoratus*

From the field survey, we found that paha frogs (genus *Amolops*, *Nanorana* and *Ombrana*) are usually hunted for food and medicinal purposes. Mainly school children and young-aged males constitute the major portion in the hunters' group however, we even noticed that female members also form separate groups to hunt paha in the region. Six hunter groups were identified during the questionnaire survey. It was found that local people collect paha from February till September. *Amolops marmoratus* is mostly hunted in Nepaledada, Kulunga and Chaukidada villages whereas, *Nanorana liebigii* and *Ombrana sikimensis* are mostly preferred for collection in Tungechha and Dobhane villages.

There is a strong belief among the local people regarding the use of collected paha frogs on specific days, as they said *Nanorana liebigii* killed on Tuesday bears magical medicinal value and the paste prepared from the frog's body can cure cuts and wounds (Figure 3). While, the same species captured on other days are taken as food and delicacy.



Figure 3: The healed wound on the left hand side (circled red) after using the paste prepared from dried *Nanorana liebigii* (right side) *Amolops marmoratus* are overly harvested by the local people and then skewered in clusters for later use (Figure 4).



Figure 4: Collection of *Amolops marmoratus* by local hunters group. Besides the survey, we carried out amphibian conservation workshops at six schools in Kulunga, Keurepani, Mulpani, Tungechha and Nepaledada (Figure 5). About 300 students participated in those workshops. Besides amphibians' importance and their conservation, we also discussed about distribution of amphibians in their locality.





Figure 5: Amphibian Conservation Workshops at Schools. In a similar way, four community workshop/discussions were conducted in Nepaledada, Mulpani, Kulunga and Dobhane to know the people's perception on amphibians and paha hunting scenario (Figure 6). We also collected information on distribution of local frogs from the community people during the workshop.



Figure 6: Local people taking part in amphibian conservation workshop/discussion